Millenium

MPS-100

e-drum module

thomann
MUSIC IS OUR PASSION

user manual

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1 General notes

This user manual contains important information on safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to other users, be sure that they also receive this manual.

Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.

Symbols and signal words

This section provides an overview of the symbols and signal words used in this user manual.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
CAUTION!	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – danger zone.

2 Safety instructions

Intended use

Drum modules are intended to be used for converting digital trigger signals from drum pads to various percussion sounds. Use the unit only as described in this manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Safety

DANGER!

Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.

CAUTION!

Possible hearing damage

With loudspeakers or headphones connected, the device can produce volume levels that may cause temporary or permanent hearing impairment.

Do not operate the device permanently at a high volume level. Decrease the volume level immediately if you experience ringing in your ears or hearing impairment.

NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.

NOTICE!

External power supply

The device is powered by an external power supply. Before connecting the external power supply, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly the user.

Unplug the external power supply before electrical storms occur and when the device is unused for long periods of time to reduce the risk of electric shock or fire.

3 Features

- 215 voices
- 20 pre-installed drum kits, 10 user kits
- 50 pre-installed songs
- Click and learning function
- Headphones, AUX and MIDI connections

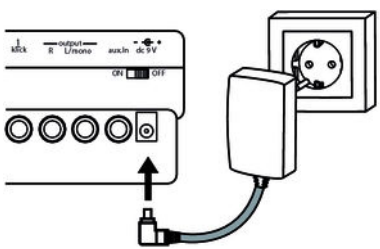
4 Installation

Setup, connecting pads and pedals

Setup and installation of the pads and pedals are described in detail in the included setup guide. Finally, check that all connecting cables between the pads and the drum module are connected correctly.

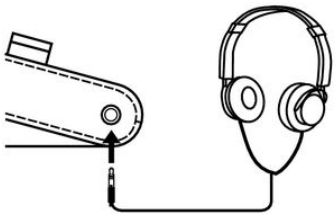
Connecting the power supply

Connect the supplied power adapter to the 9 V input of the device and then insert the mains plug into a mains wall outlet.



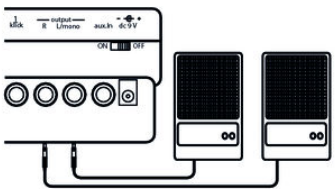
Connecting headphones

Connect your stereo headphones to the ‘PHONES’ output of the drum module.



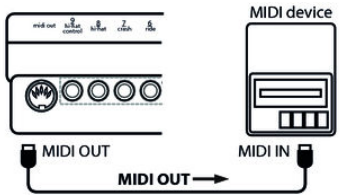
Connecting audio devices

Connect the inputs of your amplifier or powered speaker to the ‘OUTPUT’ sockets of the drum module. When using a mono amp, connect its input to the ‘L/MONO’ output socket of the module.



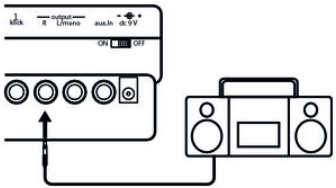
Connecting MIDI devices

Connect external MIDI devices to the ‘MIDI IN’ connections of the drum module.



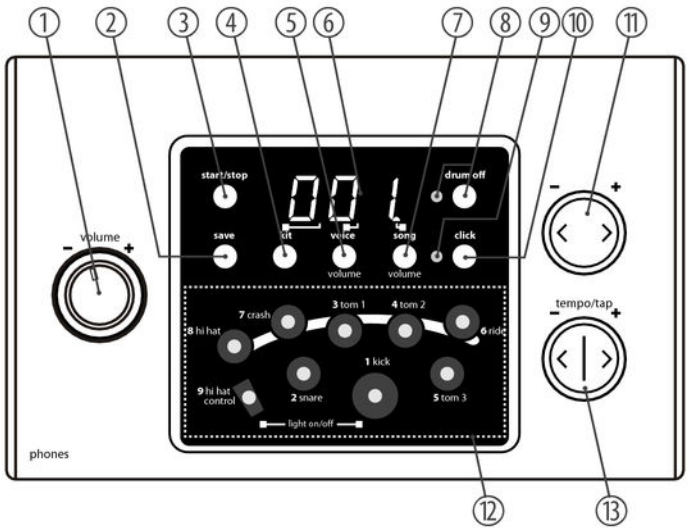
Connecting CD or MP3 player

Connect CD or MP3 player to the ‘AUX IN’ input of the drum module.



5 Operating elements

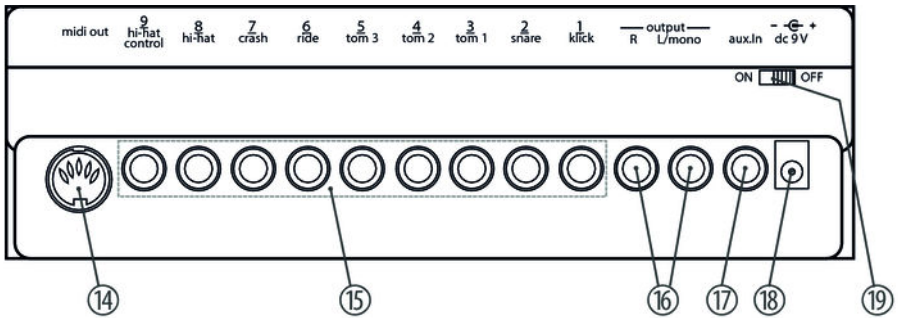
Front panel



1	*[volume]* Volume control for headphones and line out.
2	*[save]* Button for saving settings.
3	*[start/stop]* Button for starting and pausing song playback.
4	*[kit]* Button for opening the kit menu.
5	*[voice/volume]* Button for opening the voice menu and for volume indication.
6	3-digit LED display.
7	*[song/volume]* Button for opening the song menu and for volume indication.

8	*[drum off]* Button for muting the drum part. The indicator LED lights up, when the part is muted.
9	**Indicator LED** Flashes during playback according to metronome or current song beat.
10	*[click]* Button for turning the metronome on or off.
11	*[–] / [+]* Button for song and kit selection and for adjusting click and pad volume.
12	**Pad selection field** Buttons with integrated indicator LED for activating and playing the pads.
13	*[tempo/tap –/+]* Button for setting the metronome and playback speed.

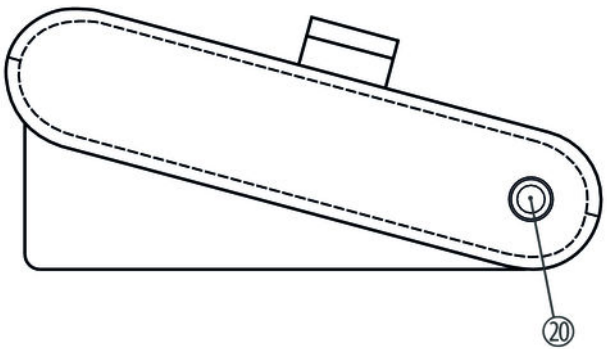
Rear panel



14	**midi out** Connection for an external MIDI device.
15	**Connection sockets** for the pads.
16	**– output – R / L/mono** Output to connect active monitor speakers, mixer or power amp.

17	**aux.in** Input for external audio devices like MP3 or CD player.
18	**9 V** Connection socket for the power supply adapter.
19	**ON / OFF** Main switch to turn the device on or off.

Side view



20	**phones** Headphones socket.

6 Operation

6.1 Functions

Switching on

Use the main switch *[ON/OFF]* on the rear panel to turn the unit on.

Check for proper connection of all cables before switching the unit on.

Before switching the unit on, turn the [volume] control down to minimum.

Automatic switchoff

– *When the device is not used, it will switch off automatically after 30 minutes. To switch it on again, switch to the 'OFF' position and then to the 'ON' position.*

Deactivating the automatic switchoff

– *To deactivate the automatic switchoff, press and hold the [START/STOP] button while you switch on the device.*

Adjusting the volume

To set the volume, hit a pad while slowly turning the *[volume]* control clockwise.

Selecting a drum kit

A drum kit is a compilation in which each trigger is assigned to a certain sound and several sound parameters. By selecting a drum kit, you can tailor the sound of your e-drum kit in seconds to the desired style of music. In addition to the 20 preset drum kits, you can create and save 10 user drum kits (see *Chapter 10.2 'Kit list' on page 40*).

Click function

Press the *[click]* button to turn the Click function on or off. The indicator LED (9) of this button is lit when the Click is turned on.

Use the *[–]* and *[+]* button to change the click volume. For this purpose, keep the *[click]* button pressed.

The click volume is reset to the default value when the unit is switched off.

Click speed can be adjusted in a range of 30 to 280 beats per minute using the *[tempo/tap –/+]* button. Press *[–]* or *[+]* briefly to increase or decrease the indicated value by one. Keep *[–]* or *[+]* pressed to increase or decrease the value quickly.

To reset the click speed to the default value '075' press the middle of the [tempo/tap –/+] button.

The click function can be turned on or off during playback.

The click speed is automatically adjusted to the song speed during playback.

Learning function

With the learning function, you can practice each of the pre-installed songs according to your own pace.

1. Select the desired song as described here: *'Selecting a song' on page 23*.
2. Adjust the desired tempo as described here: *'Adjusting the playback speed' on page 25*.
3. Start the playback with *[start/stop]*.
4. Hit the pads synchronously to the indicator LED.

To turn the learning function (display of the pads played via indicator LEDs) on or off, press the buttons [hi-hat control] and [kick] simultaneously.

6.2 Playing, customising and accompanying songs

Selecting a song

Your digital drum module offers 50 pre-installed songs in total. When turning the drum module on, song *'001'* is shown on the display by default.

1. Press the *[song/volume]* button.

⇨ The display shows the song number and the Song LED lights up on the right below in the three-digit display.

2. Use the *[–]* and *[+]* to select the desired song (see *Chapter 10.3 'Song list' on page 41*).

Playing a song

1. Select the desired song as described above.
2. Start or stop the playback with *[start/stop]*.

> *During playback, you can turn the Click on or off as desired. For this purpose, press the [click] button.*
>
> *During playback, the indicator LED of the pads played light up. Press the [hi-hat control] and [kick] buttons simultaneously to turn the function on or off.*

Adjusting song volume

1. Press the *[song/volume]* button.
   - ⇨ The song volume is indicated in *'Axx'* format in the display, the Song LED on the right below in the three-digit display turns off.
2. Adjust the volume using the *[–]* and *[+]* buttons in a range of 00 to 31.

Adjusting the playback speed

You can adjust the playback speed using the *[tempo/tap –/+]* button in a range of 30 to 280 beats per minute. Press the *[–]* or *[+]* briefly to increase or decrease the displayed value by one. Keep the *[–]* or *[+]* button pressed to increase or decrease the value quickly.

To reset the playback speed to the default value (display value '065') press the middle of the [tempo/tap –/+] button.

After two seconds the display automatically returns to the song or kit number indication.

Tap-Timer (pre-count function)

To accompany a song in your own tempo, the playback speed can be pre-counted using the Tap Timer function.

1. Select the desired song.

2. Press the *[tempo/tap –/+]* button.

⇨ The default speed of the song is indicated in the display.

3. Hit any pad – just like pre-counting – four times.

⇨ The drum module then accepts the tempo of the last two pre-count hits and the song is played with the pre-count speed.

During song playback, the Tap Timer function is not available.

Muting the drum sound

Any time during song playback, the drum track can be muted.

1. Press the *[drum off]* button, to mute the drum sound.
   ⇨ The indicator LED lights up when the part is muted.
2. Press the *[drum off]* button again to unmute the drum track.

6.3 Creating drum kits

The 215 pre-installed voices of the drum module can be freely programmed to the connected pads. In other words, you can create your own drum kits and store them in the unit. The following sections describe how to create your own kits.

Assigning a voice

To programme a certain voice to a pad, please proceed as follows:

1. Press the *[voice/volume]* button.
   ⇨ The display indicates the current voice number.
2. Press the button of the pad you want to programme a certain voice for. Alternatively, you can directly activate the pad by playing it.
   ⇨ The display shows the currently assigned voice. The indicator LED of the pad lights up.
3. Select the desired voice using the *[–]/[+]* button (see *Chapter 10.1 'Voice list' on page 34*).
4. Repeat steps 2 to 3 to assign the other pads as desired.

Adjusting the volume of the pads

You may adjust the volume of the individual pads independently from the others. To do so, please proceed as follows:

1. Press the *[voice/volume]* button to change between voice number display and voice volume display.
   ⇨ The display shows the current volume of the selected voice in *'Lxx'* format.
2. Press the button of the pad whose volume you want to change. Alternatively, you can directly activate the pad by playing it.
   ⇨ The indicator LED of the pad lights up.
3. Adjust the volume using the *[–]/[+]* button.
4. Repeat steps 2 to 3 to adjust the volume of the other pads as desired.

Storing settings

After you have assigned all the pads with the desired voices and adjusted the respective pad volume, you can save the settings as a user kit in the unit. To do so, please proceed as follows:

1. Press the *[save]* button.
   ⇨ The display shows the first unused memory slot (*'021'*).
2. Select the desired memory slot using the *[–]/[+]* button (range is 021 to 030).

3. Press the *[save]* button again to save your user kit as the desired number. To cancel the storage process, press the button *[voice/volume]*.

Any unsaved changes are discarded when you turn the drum module off.

7 Technical specifications

Number of voices	215
Drum kits	20 preset kits 10 user kits
Songs	50 preset songs

Connections	Headphones (1/4" phone socket) AUX in (1/4" phone socket) Mono/stereo outlet (1/4" phone socket) 1 × kick pad 1 × snare pad 3 × tom pads 2 × crash pads 1 × hi-hat 1 × hi-hat control MIDI out
Operating voltage supply	Power adapter (9 V ⎓)

8 Cleaning

Device parts

Clean the accessible parts of the device regularly. The frequency of cleaning depends on the operating environment: moist, smoky or particularly dirty environments may cause a higher accumulation of dirt on the components of the device.

- Use a dry soft cloth for cleaning.
- Remove stubborn stains with a slightly damp cloth.
- Never use cleaners containing alcohol or thinner.
- Never put any vinyl items on the device, as vinyl can stick to the surface or lead to its discolouration.

9 Protecting the environment

Disposal of the packaging material

For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of your old device

This device is subject to the European directive 2002/96/EC.

Do not dispose of the device with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

10 Appendix

10.1 Voice list

Nr.	Name	Nr.	Name	Nr.	Name
Acoustic Bass Drum		009	Lo BD	017	BD-Analg
001	BD Head	010	Rock BD 1	018	MrDance 1
002	Real BD 1	011	Rock BD 3	019	MrDance 2
003	Real BD 2	012	Rock BD 4	020	MrDance 5
004	Real BD 6	013	BD-Var 3	021	Lo-BD 1
005	BD Std 1	014	BD-Var 5	022	Lo-BD 2
006	BD Std 2	015	Big Drum 1	023	Hard BD 3
007	Room BD 1	016	Big Drum 2	**Acoustic Snare Drum**	
008	Room BD 2	**Electronic Bass Drum**		024	SD-Std 1

Nr.	Name	Nr.	Name	Nr.	Name
025	SD-Std 2	038	SD-Std 22	051	SidStik 1
026	SD-Std 3	039	SD-Std 23	052	SidStik 2
027	SD-Std 4	040	SD-Std 24	053	SnarTimb
028	SD-Std 5	041	SD-Std 25	054	RowDrum 1
029	SD-R 1	042	SD-Std 26	055	RowDrum 2
030	SD-R 2	043	SD-Std 27	056	RowDrum 3
031	SD-R 5	044	SD-Std 28	**Electronic Snare Drum**	
032	Snare 1	045	SD-Std 29	057	SD-Ana 2
033	Snare 2	046	SnareDr 1	058	SD-Ana 6
034	Snare 4	047	SnareDr 5	059	SD-Ana 7
035	Snare 5	048	SnareDr 6	060	SD-Ana 11
036	Snare 6	049	SnareDr 7	061	SD-Danc 5
037	SD-Std 21	050	SnareDr 8	062	SD-Danc 6

Nr.	Name
063	SD-Elec
064	Syn-SD 1
065	Syn-SD 7
066	Syn-SD 8
067	Syn-SD 11
068	Cool-SD 1
069	HD-SD 1
070	Brush 1
071	Brush 2
072	Brush 3
073	Brush 5
074	Brush 7
075	Brush 8

Nr.	Name
076	Brush 10
077	Brush 13
Acoustic Tom	
078	Tom-Std 5
079	Tom-Std 3
080	Tom-Std 2
081	Tom-Std 1
082	Tom-Jaz M
083	Tom-Jaz F
084	Tom-Brs H
085	Tom-Brs M
086	Tom-Brs L
087	Tom-Brs F

Nr.	Name
088	Tom-BRK H
089	Tom-BRK M
090	Tom-BRK L
091	Tom-BRK F
092	Tom-Rom 6
093	Tom-Rom 5
094	Tom-Rom 4
095	Tom-Rom 3
096	Tom-Rom 2
097	Tom-Rom 1
098	Tom-Rm 2 L
099	Tom-Rm 2 F
Electronic Tom	

Nr.	Name	Nr.	Name	Nr.	Name
100	TomH-A	**Cymbal**		125	RideBStd
101	Tom-A 5	113	CrashStd	126	Splash C 1
102	Tom-A 4	114	CrashBrt	127	Cymbel 2
103	Tom-A 3	115	CrashSt 2	128	Cymbel 3
104	Tom-A 2	116	SftCrash	129	BigGong 1
105	Tom-A 1	117	CrashSt 3	130	BigGong 2
106	Tom-T 1 M	118	CrashSht	131	B.Cymbl 1
107	Tom-T 3 L	119	CrshThin	132	B.Cymbl 2
108	Tom-T 3 F	120	CrashRev	133	S.Cymbl 2
109	Tom-El 4	121	CrashRol	134	S.Cymb 2 M
110	Tom-El 3	122	CrashSt 4	135	SmalGong
111	Tom-El 2	123	RideBel 1	**Hi-Hat**	
112	Tom-El 1	124	RK Ride 2	136	H.H Cls 1

Nr.	Name	Nr.	Name	Nr.	Name
137	H.H Cls 3	150	Ana Hh 1	162	Conga-Hi
138	H.H Cls 4	**Percussion**		163	Conga-M 1
139	H.H Opn 1	151	Agogo-1	164	Conga-M 2
140	H.HCNor 1	152	Agogo-2	165	Conga-3
141	RK HHcls	153	Bell Tre	166	Conga-4
142	H.H Opn 3	154	Bongo Hi	167	Conga-5
143	Open HH 2	155	Bongo Lo	168	CowBell 1
144	Open HH 3	156	Cabasa 1	169	CowBell 2
145	Open HH 4	157	Cabasa 2	170	Cuica H
146	RK HHOpn	158	Castanet	171	Cuica L
147	Open HH 7	159	ClapA	172	Fsnap
148	HH pedl 1	160	Clavis 1	173	Guiro 1
149	HH pedl 2	161	Clavis 2	174	Guiro 2

Nr.	Name	Nr.	Name	Nr.	Name
175	HiQ	188	Tabla 4	201	Whistal
176	JingBell	189	TalkD	202	XfadeTri
177	Maracas 1	190	TalknDrD	203	Smallwod
178	Maracas 2	191	TalknDrU	204	BoardDr 1
179	MetroBel	192	TalknDrV	205	BoardDr 2
180	MetroClk	193	Tambouri	206	LotusBrd
181	Scrach	194	TimbleH	207	BanbuBrd
182	Shake	195	TimbleL	208	SouthBan
183	Surdo 1	196	TimblePH	209	B.WdFish
184	Surdo 2	197	TimblePL	210	S.WdFis 1
185	Tabla 1	198	Triangle	211	S.WdFis 2
186	Tabla 2	199	TriagMut	212	S.WdFis 3
187	Tabla 3	200	VibrSlap	213	S.WdFis 4

Nr.	Name		Nr.	Name		Nr.	Name
214	ImpacBel		215	ImpaBel M			

10.2 Kit list

Nr.	Name		Nr.	Name
001	Standard 1		008	Room Stick
002	Standard 2		009	Latin 1
003	Dance 1		010	Latin 2
004	Jazz Latin		011	Jazz
005	Room 1		012	Brush 2
006	Electric		013	Dance Stick
007	Brush		014	Orchestra

Nr.	Name		Nr.	Name
015	Drum & Bass		018	Ungle
016	House		019	China LuoGu
017	Rhythm & Blues		020	Oriental 1

10.3 Song list

Nr.	Name	Takt		Nr.	Name	Takt
001	Guitar	4/4		006	Newage	4/4
002	Accordion Fusion	4/4		007	Reggae Funk	4/4
003	Folk Pop	4/4		008	Drum & Bass	4/4
004	Rock	4/4		009	Pop 8 Beat	4/4
005	Blues	4/4		010	Dance	4/4

Nr.	Name	Takt		Nr.	Name	Takt
011	Drk -2	4/4		023	Rock Pop 4	4/4
012	Pop 3	4/4		024	Latin 4	4/4
013	Pop 5	4/4		025	Latin 5	4/4
014	Jazz 1	4/4		026	Reggae	4/4
015	Rhythm & Blues 4	6/8		027	Shuffle 1	4/4
016	Ballad 1	4/4		028	Rhythm & Blues 3	4/4
017	Ballad 2	4/4		029	Rock 'N' Roll 1	4/4
018	Ballad 4	4/4		030	8 Beat 4	4/4
019	Ballad 5	4/4		031	8 Beat 2	4/4
020	Ballad 6	4/4		032	16 Beat	4/4
021	Waltz	3/4		033	March	4/4
022	Slow Rock	6/8, 9/8		034	Latin 6	4/4

Nr.	Name	Takt		Nr.	Name	Takt
035	Funk 3	4/4		043	Dance 1	4/4
036	Fusion 2	4/4		044	Dance 2	4/4
037	Rock 'N' Roll 2	4/4		045	Mambo	4/4
038	Hard Rock 3	4/4		046	Rhythm & Blues 1	4/4
039	Rock Pop 2	4/4		047	Rhythm & Blues 2	4/4
040	Funk 1	4/4		048	Ballad 3	4/4
041	Funk 4	4/4		049	Jing Opera	4/4
042	Jazz 3	6/8		050	Chinese Rhythm	2/4

10.4 MIDI implementation

Function		Transmitted	Remarks
Basic channel	Default	Ch 10	
	Changed	No	
Mode	Default	No	
	Messages	No	
	Altered	********	
Note number	True voice	0…127	
		********	
Velocity	Note ON	Yes (9nH, V=1…127)	
	Note OFF	No (9nH. V=0)	
Aftertouch	Keys	No	
	Channels	No	

Function		Transmitted	Remarks
Pitch bender		No	
Control change	0	No	Bank select
	1	No	Modulation
	5	No	Portamento time
	6	No	Data entry
	7	No	Volume
	10	No	Pan
	11	No	Expression
	64	No	Sustain pedal
	65	No	Portamento ON/OFF
	66	No	Sostenuto pedal
	67	No	Soft pedal
	80	No	Reverb program

Function		Transmitted	Remarks
	81	No	Chorus program
	91	No	Reverb level
	93	No	Chorus level
	120	No	All Sound Off
	121	No	Reset All Controllers
	123	No	All Notes Off
Program change		No	
	True #	No	
System exclusive		No	
System common	Song Position	No	
	Song Select	No	
	Tune	No	
System real time	Clock	No	

Function		Transmitted	Remarks
	Command	No	
Aux messages	Local ON/OFF	No	
	All Notes OFF	No	
	Active Sense	No	
	System reset	No	